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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/777,645

02/13/2004

Roman Kappeler

KAPPELER2

5390

1444 7590 02/09/2007
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EXAMINER

CARTAGENA, MELVIN A

ART UNIT

PAPER NUMBER

3754

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/777,645

Applicant(s)

KAPPELER ET AL.

Examiner

Melvin A. Cartagena

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 7-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: in line 2 of the preamble "a medium" is claimed, accordingly, in line 6, the container should receive --the medium-- to avoid double inclusion of the medium. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-10, 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,850,425 to Anderson in view of US 5,814,790 to Bondeson et al.

Anderson shows an apparatus that dispense a medium capable of flowing that undergoes a change to a state of lower viscosity when exposed an increased temperature, as seen in Fig. 1, having a container 18 to receive the medium, a melting device 54 to cause an increase in temperature, an outlet zone 56, see Fig. 2, a storage unit 15 for the medium with lower viscosity and heated by heater 25, a cooling device, see column 3 lines 27-37, consisting of a coolant flowing through channels 58 and circulator 66 to remove heat from the device, heating cartridge 54, temperature sensor 47, control unit 12, and pump 30. The cooling and melting devices are separately realized, see Fig. 4.

Anderson is silent about using a level sensor to sense the level of low viscosity medium. Bondeson shows an apparatus for liquefying thermoplastics such as PURs or polyurethane with a

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lever sensor 47 located in the storage unit 43. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of Anderson to include a level sensor in the storage unit to indicate the controller when to activate and deactivate the melting process in the melting device as taught by Bondeson, see column 4, lines 65-67 and column 5, lines 1-6.

With respect to the method claimed in claims 14 and 15, the device of the Anderson-Bondeson combination performs the method steps of interrogating whether there is sufficient medium in the storage unit, by using the level and temperature sensors, and activating the heating or cooling devices as required to pump and dispense the medium.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,850,425 to Anderson as modify by US 5,814,790 to Bondeson et al. as applied to claim 10 above, and further in view of US 5,381,511 to Bahar et al.

The device of the Anderson-Bondeson combination shows all the claimed features as discussed above except for the use of a heated hose to transport the hot adhesive. Bahar shows a flexible electrically heatable hose as seen in Figs. 1-4, used to transport hot adhesive. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the heatable hose of Bahar to transport the hot adhesive in the device of the Anderson-Bondeson combination to maintain the desired viscosity through the dispensing process without having to maintained an excessive temperature in the melting container as taught by Bahar.

5. Claims 12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,850,425 to Anderson as modify by US 5,814,790 to Bondeson et al. as applied to claim 10 above, and further in view of US 4,635,820 to Marshall.

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The device of the Anderson-Bondeson combination shows all the claimed features as discussed above except for a cover with a follower plate with a flexible joint seal. Marshall shows a thermoplastic material dispenser as seen in Fig. 2, having a flower plate 21 with a flexible seal 81 to exert pressure on the material 65. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Anderson-Bondeson combination to include a follower plate with a seal to dispense thermoplastics from standardized pre-filled containers that can be completely emptied to reduce material waste while reducing machine loading time as taught by Marshall.

In reference to method claim 18, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to switch on the press after the melting device has been switched on and to switch the press off before the cooling device is switched on in the device of the Anderson-Bondeson-Marshall combination to provide pressure on the thermoplastic only when the heating plate has reached a working temperature and to keep the plate from adhering to the content of the container at the end of the dispensing operation.

Response to Arguments

6. Applicant's arguments with respect to claims 1-4 and 7-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kautz et al. shows a hot melt liquefying and pumping mechanism.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

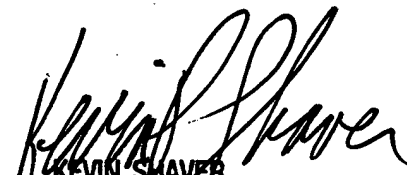
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on T-F (7:30AM to 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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